Experiment Number: **G94009B**
Test Type: **Genetic Toxicology - Micronucleus**
Route: **Inhalation**
Species/Strain: **Mouse/B6C3F1**

G04: In Vivo Micronucleus Summary Data
Test Compound: **2,3-Butanedione**
CAS Number: **431-03-8**

Date Report Requested: **09/23/2018**
Time Report Requested: **16:31:59**

NTP Study Number:	G94009B
Study Duration:	13 Weeks
Study Methodology:	Flow Cytometry
Male Study Result:	Negative
Female Study Result:	Negative

Experiment Number: **G94009B**

Test Type: **Genetic Toxicology - Micronucleus**

Route: **Inhalation**

Species/Strain: **Mouse/B6C3F1**

G04: In Vivo Micronucleus Summary Data

Test Compound: **2,3-Butanedione**

CAS Number: **431-03-8**

Date Report Requested: **09/23/2018**

Time Report Requested: **16:31:59**

Tissue: Blood; Sex: Male; Number of Treatments: 65; Time interval between final treatment and cell sampling: 24 h

		MN PCE/1000			MN NCE/1000		% PCE	
Dose (ppm)	**N**	**Mean ± SEM**	**p-Value**	**N**	**Mean ± SEM**	**p-Value**	**Mean ± SEM**	**p-Value**
Vehicle Control[1]	5	2.420 ± 0.085		5	1.450 ± 0.032		1.442 ± 0.058	
6.25	5	2.580 ± 0.155	0.3212	5	1.502 ± 0.036	0.5605	1.540 ± 0.103	0.8517
12.5	5	2.480 ± 0.127	0.3836	5	1.420 ± 0.019	0.6452	1.486 ± 0.063	0.9508
25.0	5	2.530 ± 0.152	0.4091	5	1.468 ± 0.036	0.6794	1.495 ± 0.055	0.9757
50.0	5	2.710 ± 0.253	0.3145	5	1.446 ± 0.047	0.6985	1.441 ± 0.203	0.9856
100.0	5	2.470 ± 0.175	0.3231	5	1.366 ± 0.047	0.7120	1.547 ± 0.099	0.7530
Trend p-Value		0.4306			0.9786		0.8501	

Trial Summary: Negative

Experiment Number: **G94009B**

Test Type: **Genetic Toxicology - Micronucleus**

Route: **Inhalation**

Species/Strain: **Mouse/B6C3F1**

G04: In Vivo Micronucleus Summary Data

Test Compound: **2,3-Butanedione**

CAS Number: **431-03-8**

Date Report Requested: **09/23/2018**

Time Report Requested: **16:31:59**

Tissue: Blood; Sex: Female; Number of Treatments: 65; Time interval between final treatment and cell sampling: 24 h

		MN PCE/1000			MN NCE/1000		% PCE	
Dose (ppm)	**N**	**Mean ± SEM**	**p-Value**	**N**	**Mean ± SEM**	**p-Value**	**Mean ± SEM**	**p-Value**
Vehicle Control[1]	5	2.200 ± 0.331		5	1.078 ± 0.019		1.414 ± 0.153	
6.25	5	1.820 ± 0.127	1.0000	5	1.044 ± 0.030	0.8395	1.342 ± 0.118	1.0000
12.5	5	2.060 ± 0.136	1.0000	5	1.106 ± 0.024	0.9049	1.401 ± 0.122	1.0000
25.0	5	2.050 ± 0.185	1.0000	5	1.046 ± 0.032	0.9248	1.332 ± 0.088	1.0000
50.0	5	2.000 ± 0.079	1.0000	5	1.043 ± 0.019	0.9357	1.472 ± 0.160	0.9072
100.0	5	1.650 ± 0.107	1.0000	5	0.923 ± 0.032	0.9420	1.627 ± 0.072	0.2553
Trend p-Value		0.8133			1.0000		0.0615	

Trial Summary: Negative

LEGEND

MN = micronucleated, PCE = polychromatic erythrocyte, NCE = normochromatic erythrocyte
CAS Number = Chemical Abstracts Service registry number
N = Number of subjects
Values given as Mean or Mean ± Standard Error Mean
Pairwise comparison with the control group; values are significant at P <= 0.025 by Williams or Dunn's test
Dose-related trend; significant at P <= 0.025 by linear regression or Jonckheere's test
* Statistically significant pairwise or trend test
1: Vehicle Control: Air

** END OF REPORT **